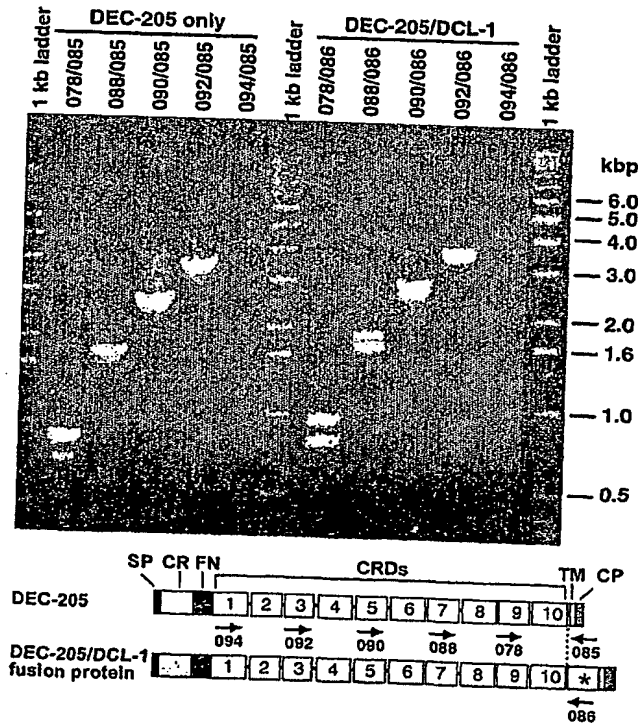**Figure 1**

Figure 2

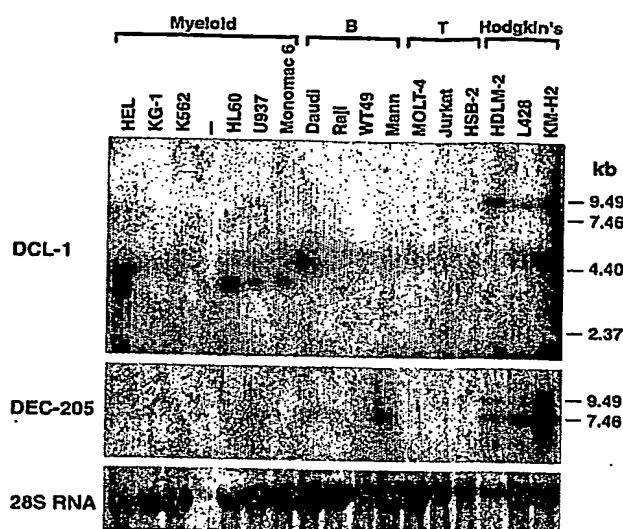Figure 3

Figure 4

Figure 5
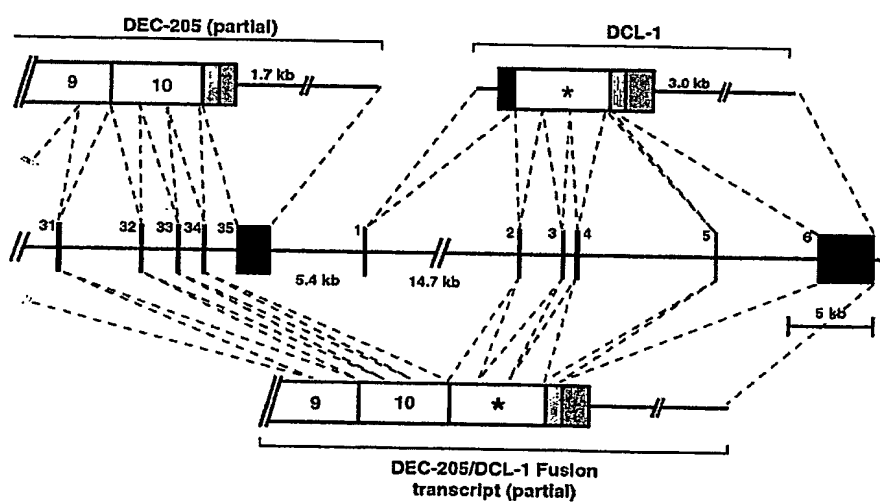
Figure 6

DEC-205 mRNA

3'-RACE clone (pB30-3)

3'-RACE clone (pB30-1)

KG1 cDNA library clone
DCL-1/KIAA0022 (partial)

DCL-1 5'-RACE (on HEL cDNA)

DEC-205 ECD

TM, CP and 3'-UT

DCL-1 5'-UT and SP

ECD, TM, CP and 3'-UT

1 kb

Figure 7

Figure 8

DCL-1
(KIAA0022)

28S rRNA
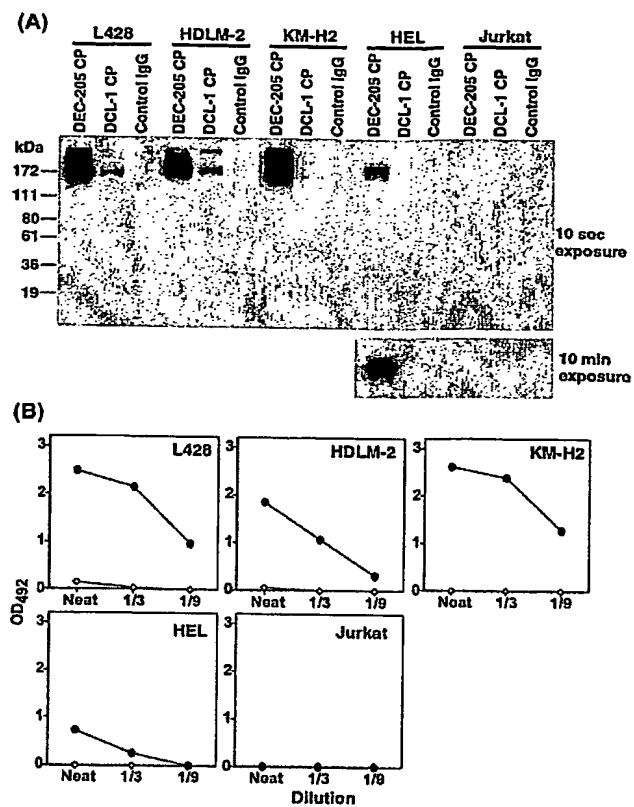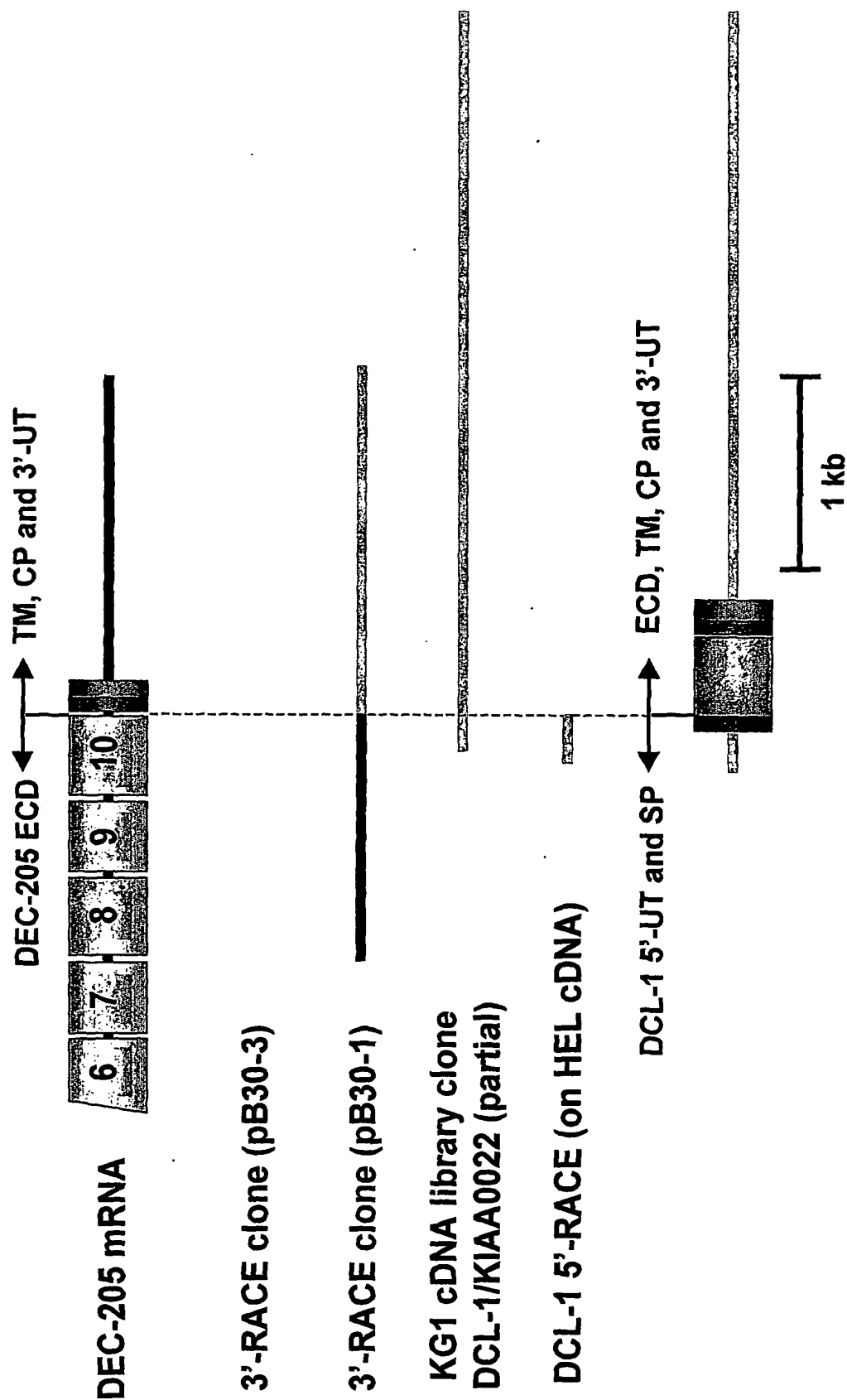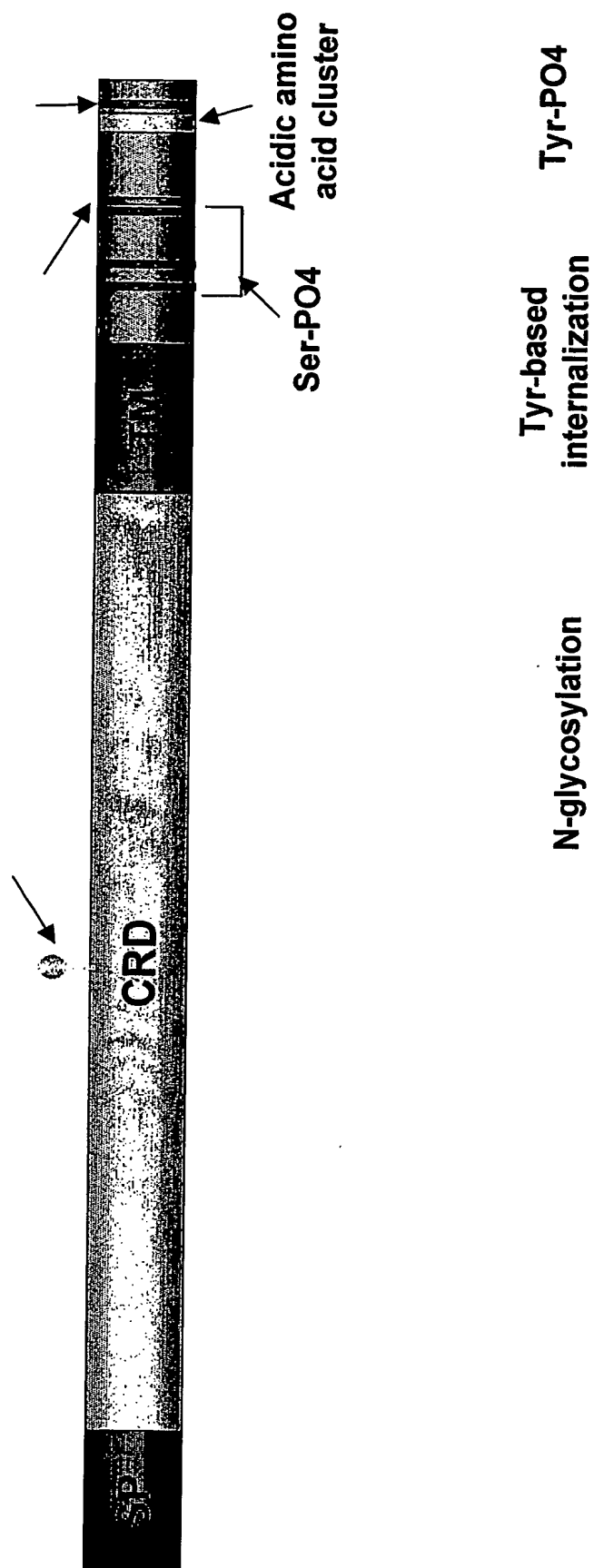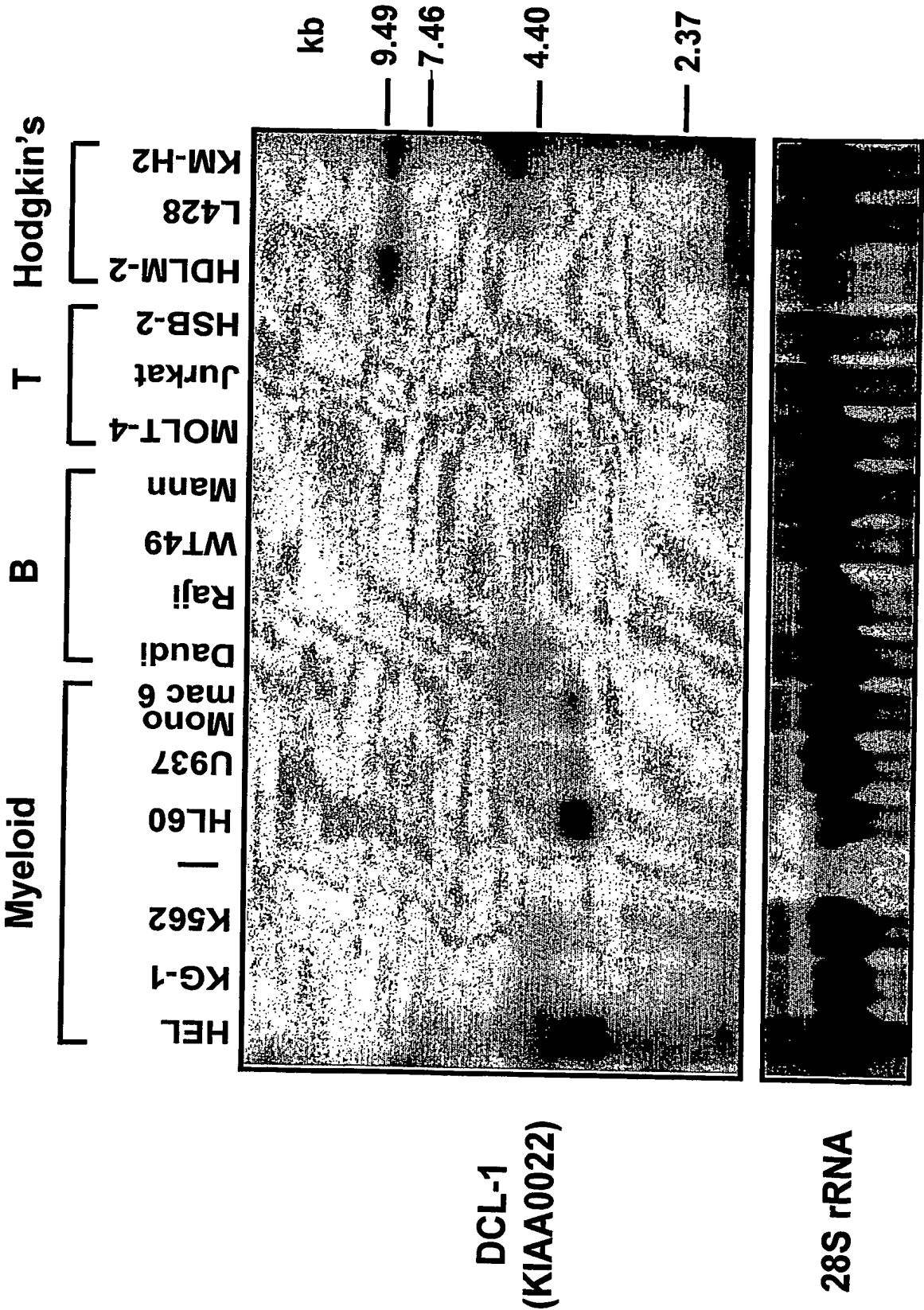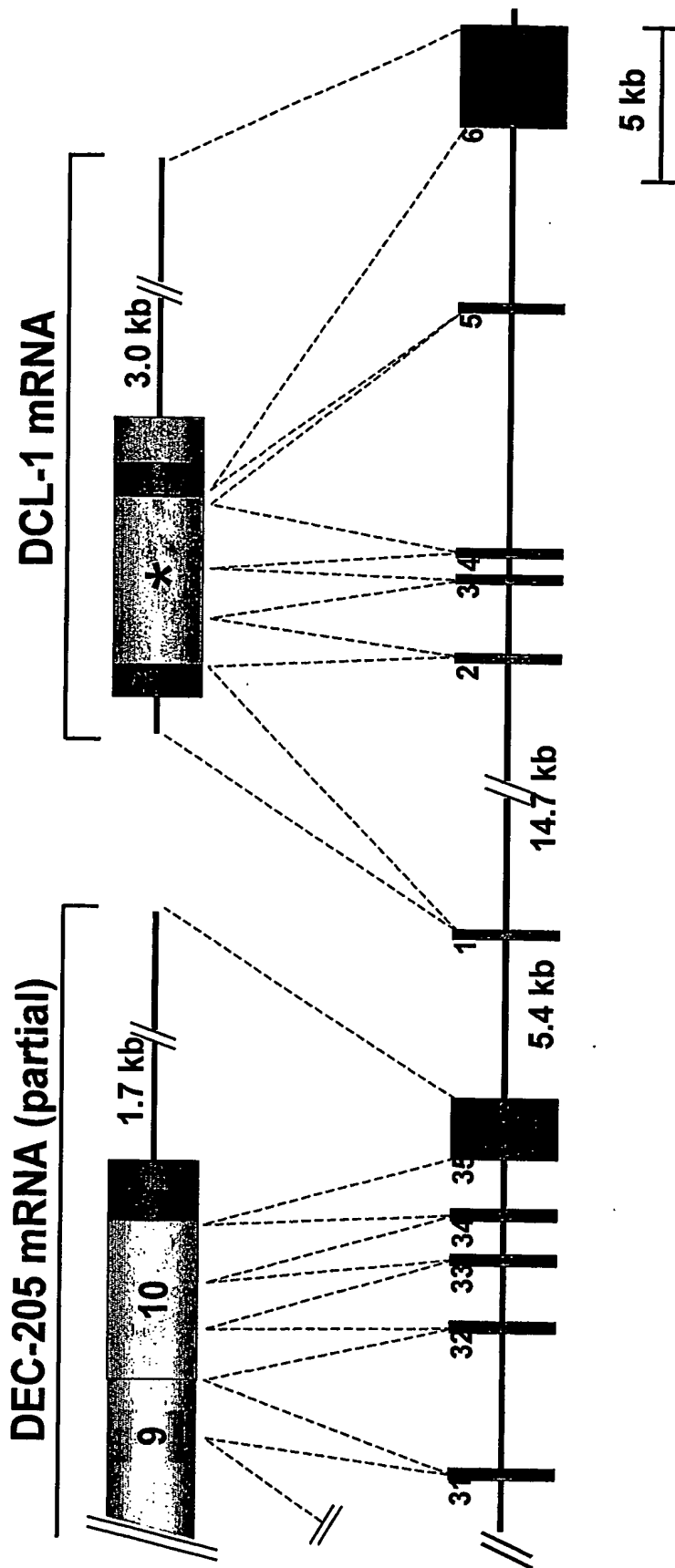
Figure 9

Figure 10

FLAG-DCL-1 expression vector

CMV or EF-1α promoter

SP FLAG CRD CRD CRD CRD

FLAG-DCL-1-Ig fusion protein expression vector

CMV promoter
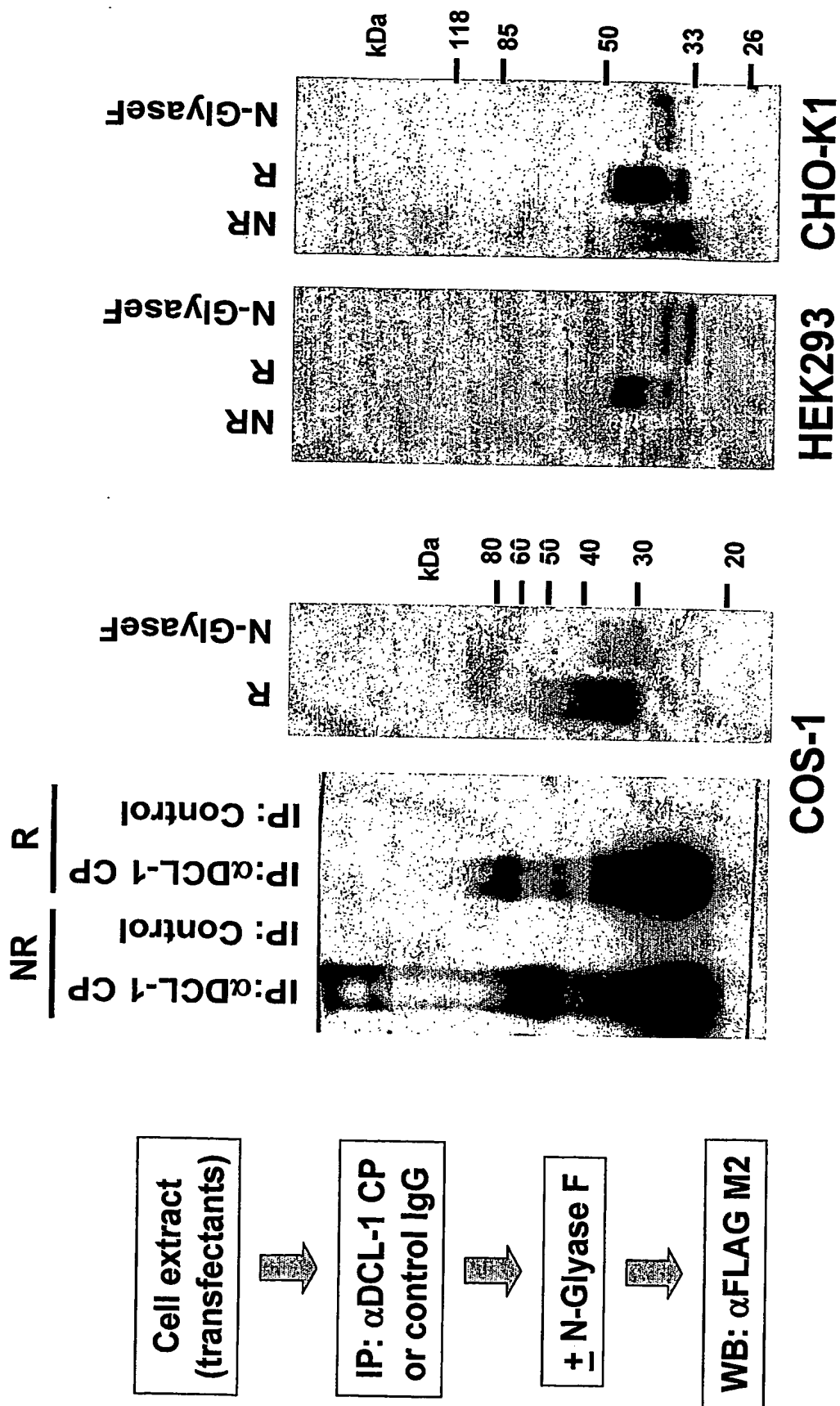
SP FLAG CRD Human IgG-Fc

Figure 11

Figure 12

Figure 13

Immunize mice (i.p.) with FLAG-DCL-1 transfectants (HB12-clone 3)

Boost mice with DCL-1-Ig/ICFA (2-3 X)

Fuse splenocytes with NS-1

Screen hybridomas (~3000 primary hybridomas) by:

- Dot blot for IgG producers.
- ELISA for DCL-1-Ig+/human IgG-.
- FACS for: HB12-clone 3+/wt CHO-.
    Monocyte+/granulocyte+
    IP/Western on HB12-clone 3+/PBMC+
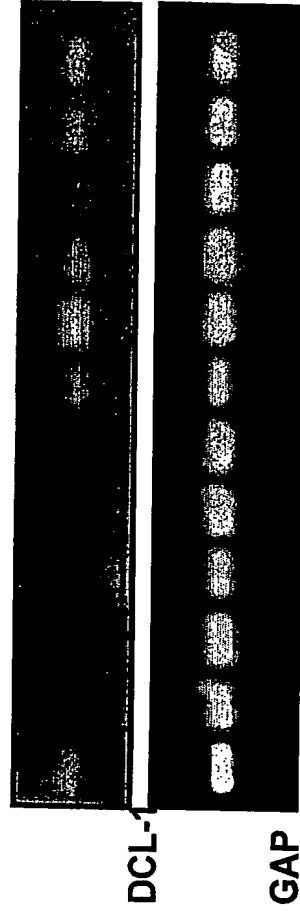
Figure 14

Figure 15

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 121   tccagaggcc ctcatgggtg aagtataatt gcacagttta tgcatacatt gtagcaaaca
 181   tagcttaaag actcttcatc caggagctgg taacagagaa aagttgtcta agagacatag
 241   tccactgaaa ggggtctttg aaaaggagga ttctggccag tagatccaaa gaagaaggct
 301   ggcaaacgcc accttaacca actgatccaa gttaacatca gtgatgagac atcgacatct
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 481   ggccagtact ttttaaatgt ggtttgatcg tgaaagaaaa agaatgacag agaaccgtcc
 541   tagattaaag ggagactaag gagacacgac atgcaatgta tgatcctgga ttgaatcttg
 601   gaacagaaaa ggacccttag aggggcaatt aatgaaatgt ggtaagtgct gtagattagc
 661   taatcgcatt atcccagtgc gagtgccctg tgtttgatca ctgcactggc gttatataca
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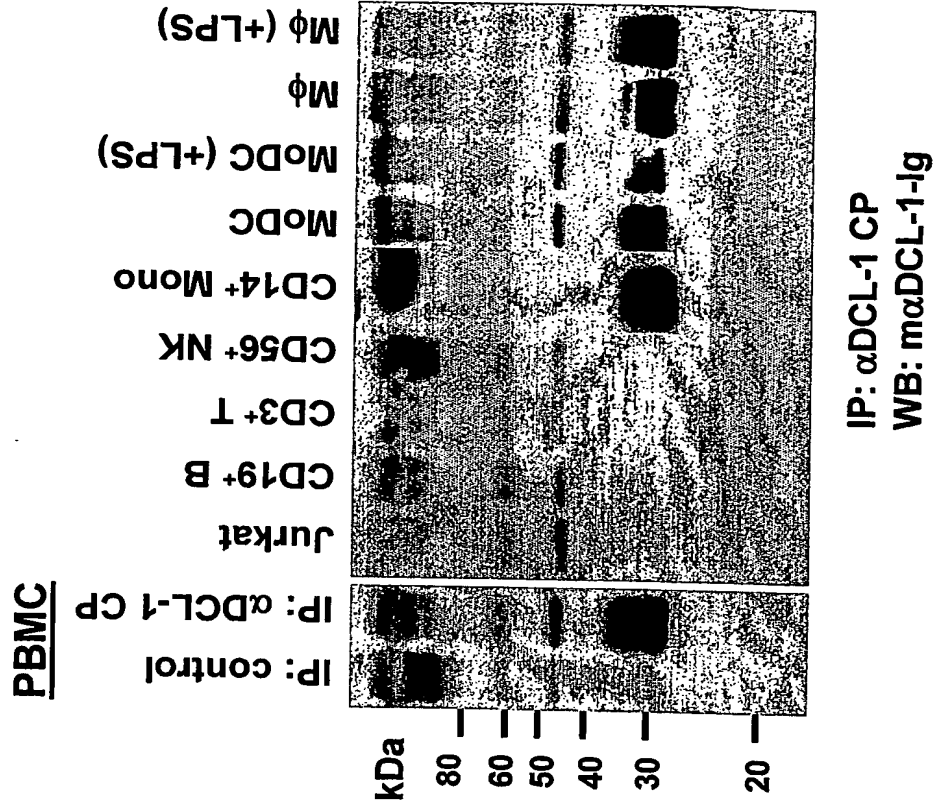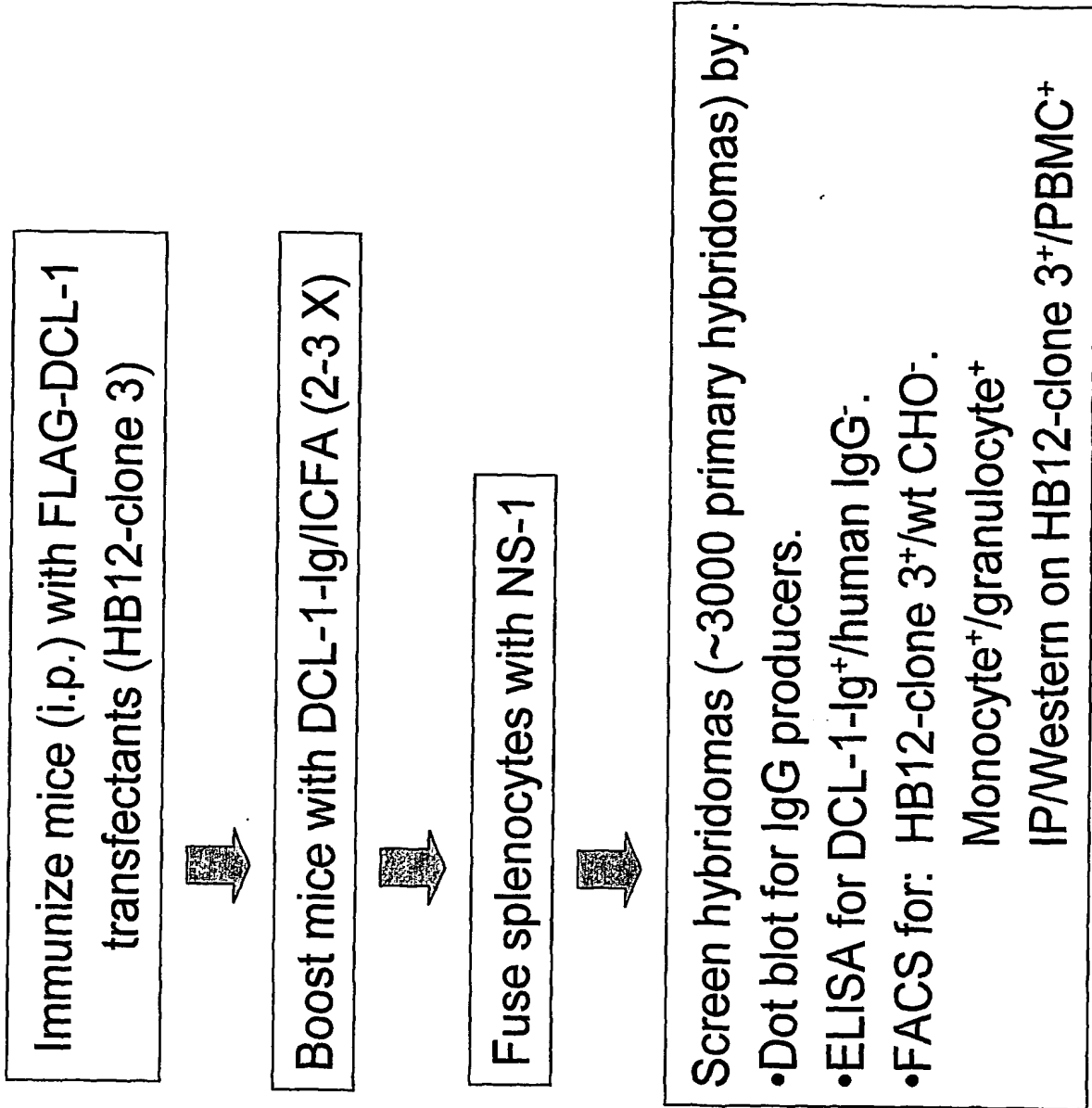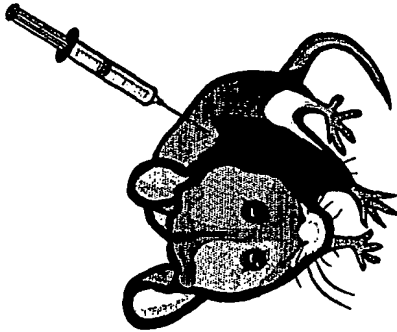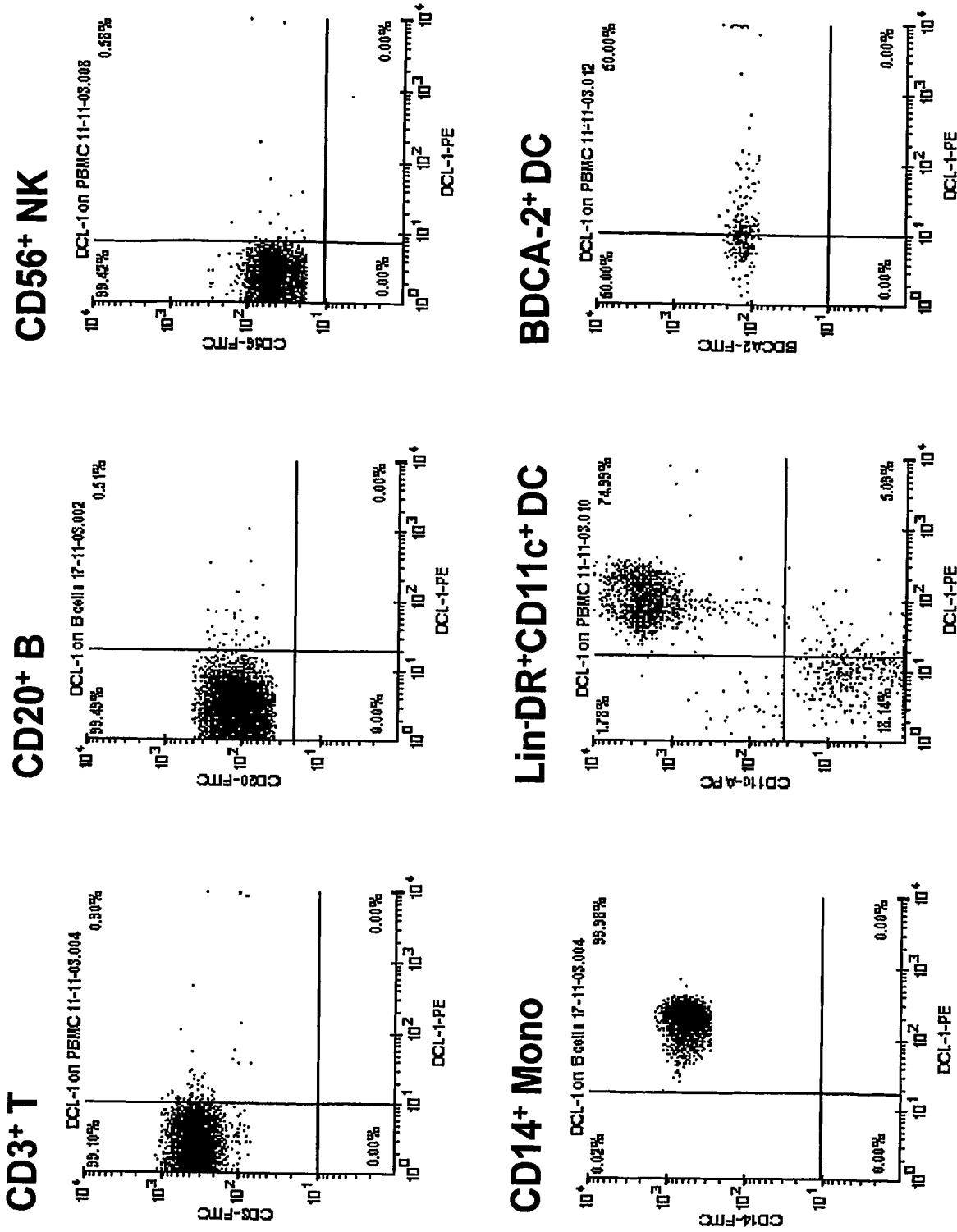
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Figure 15 (cont'd)

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3661   ctgtcacatg tccatgtttt atcttttcca agcctttctg aatgcattgt gtttattcat

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4321   atggcacagt tatgtttcag gggaaattat ctcagattaa atattagagt attttaaaat

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5761   aagaatcact tcctcatgct gtgcctgttt ttttttttctt tttttaaaaa aaagagagac

5821   agagaactta taaaggaaca gagagttcta ttagatttga ctggtaatgc aaagtattcc

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Figure 15 (cont'd)

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10801  taggccacgt gctggagcct attgctctgc agtaacttgc ggaacctgta tggcatgttg

10861  ctatactgaa tactgtaggc aattgtagca caacataagt atttgtgttt ctaaacatag

10921  caaaagcaca gtaaaaataa tggtattata acctcatggg aaccctgcca tatatagtct

10981  atcattgacc aagatgtcat tatatggtgc atgactatgt acatcttaaa tgaaagataa

11041  gctgccattc tacaattctg tatttgcaaa gatagccatc aaacatgaag acagtataaa

11101  gacctttttt cttttctttt tttttttttt gagacggagt ctcactctgt tgtcaggctg

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11221  cctgcctcag gctccccaat agctgggatt acaggcaccc gccaccacac ccagctaatt

11281  ttttgtattt tttagtagag acaggttttc accatgttgg ccaggctggt ctcaaattcc

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11521  gcgagaagga atgaagagca acagagaggg taaatatgta tttaaatcta aaagaacacc

11581  ggccaggcaa aacagtaata aaacaataag ataaaggaaa ggaagccaat gaaattaaaa

11641  tattgtatgt ttctaggact gcctaggaag tggtaaaagt actgatttat ttgaggtatt

11701  aataaatcaa ggtcacatat tataattttc agggtagcta ctacagaaaa aaaattaaag

11761  aatatataat taacaagcta aaagaaaaag gatcaaatat aaaatgttta atacaaaaaa

11821  gacaataaat gagaaaaaag gaacataaaa taagtaggac aaatgaaaaa caaatattaa

11881  gatggtagat ataaactcca attcatcgta actacattaa gtattactgg aaatacttca

11941  attaaaagac aaaggtgatc aagctggatt taaaaaaaaa ctacttgctg cttgcaagaa

12001  ttataactac ttagaaaaag tgtttggcag tatctgtgaa agctgggcac atgcatactc

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12121  aagcagcatt acaatggcca caaactagaa actacccaaa tattcatcaa cagaagaatg

12181  aataagttct tagataagtc ttaaataaaa tgatttttaa agtaacattt atcaaaagaa

12241  gccagacaca aaagagtaca caatgtatga ttccataact ataaagttca aaaacaggca

12301  aaactaatcg atggtgttag aagttaggtt agagatgacc tttggaaggg atggtgagca
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13321   agataaaaac  ataagtctgt  ctgacgttaa  agccgtgttc  ctgctggtac  tttacactgc
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13921   cagctggaag  gaaaaaaaat  ttggatataa  aataaattat  aggtggggca  cagtggctct
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Figure 15 (cont'd)

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14281   gagcacactg cttccttta aaggcaagac cgctatgttg aacattccac ttctgctaaa

14341   ccctaattat ccagaagtta taagactgcg aagcaatcta gcttggtggc catgtgctct

14401   gtgctatata agaagctgag gtcagtactg gggacaacca atgctctctg ccatattctg

14461   agcttagtaa acttgagagt gttgaattaa tttagattaa tgtagctgat tggtaaattc

14521   tgatctttgt ggtagggctt gcttctactt gtttatatta aaaaggtaat gcagaactta

14581   ggcctggcgt ggtggctcac acctgttatt ccagcagttt aagagaccaa ggcgggtgga

14641   tcgcttgtgc ttaggagttt gagaccagcc tgggcaacgt ggcgaaacct tgtctctaca

14701   aaaatacaa aagttagccg ggcatggtgg cacatacctg cagtcccagc tacacggaac

14761   gctgaggtgg gaggatccct tgagcccagg aggcagaggc tgcagtgagc tgagatcgcg

14821   ccactgcact ccagccagga cgacagtaca agatcttgtc tcaaaaaaa aaaaaaaaa

14881   aaaaaaaag cagaacttaa aacataaaat tgctacatat ttatatagat gaaatcacta

14941   agatttttac ctatatacaa acctaacaga atatggacgc ttactgcttt gtacttcttt

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15061   ggttactttt gcttttaata ctaaccaatt aaattctaga gcctaggctt aaaaatgcaa

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15241   taaattaaga acattcataa gaacatcaat cttgttttcc tgtgcaatat gaaaacttgt

15301   gtgaatattt ataggctagc aacttgtttt tcttttctct gttcttggag gtataatttg

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15661   cctttgtgtg tgtgtgaaaa tttagtatct aatatcctta tctttgggaa ttcatgtaat

15721   tctttttctc aagttatttta acagtgttct tcttttttct acatagACTG TCCTTCATCT

15781   ACTTGGATTC AGTTCCAAGA CAGTTGTTAC ATTTTTCTCC AAGAAGCCAT CAAAGTAGAA

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Figure 15 (cont'd)

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18901  tgtacacagg  atatattcct  ccttctaatt  ttaatcctac  aatcagaagt  ttagaccaga

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23281  ctgggcgaga cagagcaagc ctccatctaa aacaaaacaa aacaaaacca ccacaaaaaa

23341  aaaagaaaaa taagccagtc ataaaaggcc aaattctgta taattcttac ctatagtatg

23401  aggtacctaa agtagtcaac ctcaccaaga aactctttgc caagggttag gtcaggaaga

23461  aatgggagtt aataggtac agtttccatt ttacaaaatg agttgttctg tgaatggatg

23521  gtggtgatgt agcacaacga agtgaatgta cttaatgcta ctgcacacct aagatggtat

23581  ttgttacatg tatttctttta aattacattt ttaaaaaatc aagcagcgga agcatgttat

23641  ttagacatgg agacagataa atagctgaag caacagtagt agttaacttt aaggaatgga

23701  tgttcaggtg agtagtggag caggagcaca gtattttcac tacgtatctt ctagaactat

23761  gacttttaag ctacgtaaat gtattacttt ggaaaaaata aagatacaca taagttggaa

23821  catttagaaa aaaataggtc tgtggcttca aaaacgaata gttgaaagat ctggcaacat

23881  atggtcttca gactacaaga aaagtaatct ctgaattcat tacatgtatg catgtatata

23941  tgtgcatgta aatctgtatt aaatatgtgt atgtaattta gtgagtaaac actatgtgtc

24001  aggctttctc ctaaagttag acattgaaga cagagcaatg aacaaaacaa aagcctctgc

24061  tctcaagcat acattctagt gggaagggta aaacaaaact atgtgagatg gtgacacatc

24121  ctatagggaa aacaggcaga taaggatgaa ttccagtgca agaagggagg tgttgcactt

24181  tattttttatt tttagtacag tggccaggga aggcctcatt taataaggcc atgattttgc

24241  ataatgaaga cctaaagtca aagtgaaagc ctgtcatgta gatagggatt aggcttagtc

24301  tgactttaag gagtaaaaca gtagagaaca tggagttgaa gcagcaagga aacaacccaa

24361  cagttaagtg tagctgccat cttggcaaac agggagttcc ccttcatacc aagggtaagc

24421  tggaagactc ccttgggaag aatactttca acagaattaa ggtgtccata gtcggatgca

24481  cctagtgtgg caagcacaca ggaaaggtca agttagtcca agctgggttc agcaaaggtt

24541  actggagagg atgcaggagt taaatcttca aggataagta gacatcaggc aggagacaga

24601  ggacaggtta tctgaggtga caaatcagga ccaaggtgaa gggttgaatt tttgctgtca

24661  cttactaaat ggacttgggc aagtcattta accctgtgc ctcagaatta aatgcacagt
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24721  tggcactctc  acctgaggct  acagcctaac  aaaatgtttc  atatagtttt  tgaggtggat

24781  tatgtatagt  tcgggcctca  gatgatcagt  gttagaacta  gagcgttaag  gtagcagtca

24841  gatagataaa  taggaaacag  aagaaaaatg  tgtagtcttc  acaatttata  gagaggaagt

24901  ctataaattt  ccagattggt  tgactggaca  gtggctattt  atttgcagga  attcaggtta

24961  gaagaaattt  ggaagtaggg  ctacacacac  atatttatct  atggatttac  ataaaagact

25021  tgaatggttg  agatcaacca  tggaaagctt  tgagtccaca  aagatgacta  ggaagcagtc

25081  gtctgaaaaa  tagagcagtc  agggaagcca  agtgagtagg  agataacttc  aaggctggac

25141  ggctaacaat  ctagttgccc  caggatgaac  taaaacatcc  acgtgtttaa  gcatgtagtc

25201  ataaagagat  cattggtgac  ctctgccaca  gaaatttctg  aagaaatgtt  gagaaaatgg

25261  attaaatggg  cttaagaaat  gaaaaagtga  gcttgtttca  gtgtttgctg  tttcctcaag

25321  taaggaacat  tgttaggcta  aaaagtattt  ttcctaaatt  ttgtttcttt  aaaaaaaaca

25381  ggatttcatg  gtaaatagct  attatatgct  gtcaagcaag  caatggacct  ttcctttaat

25441  taatgaggta  gataatacat  ttcctaatgt  aaaactatcc  taacctccag  atataaacta

25501  cacattgttt  taatacactg  cttatcagtt  gccttgacaa  ttgactttgt  cacacatttt

25561  agtagtatgc  agctagctaa  ctaaaacccc  tggaggcaac  tttggctaaa  ggtcacttgc

25621  agaatgtgaa  aagcagcata  tatacttact  gtgtctcgcc  catcttggac  actgtccagt

25681  tcttaggata  cccggtcttt  taaagctatt  atgattgagt  ctgtaaatat  ttctcaatta

25741  ctatgatctt  tcagactttt  ctatattact  atcatgtaat  tcctatttaa  agtagatgct

25801  accgattatg  aagccattat  tgtacaatca  ttagtacact  gaaataaagt  gtgttcacac

25861  tggtaaagtt  gaggttctac  actgaaaatg  gactatgtta  attctaataa  aactaactac

25921  ggggctgggc  acggtggccc  acacctgtaa  tcccagcact  ctgggaggcc  gagggggggca

25981  gatcacttga  agccaggggt  ttcggaccaa  cctgggcaac  atggcaaaac  tgtctctact

26041  aaaaatacaa  aaattagctg  gacatcatgg  cgtgcgcctg  tcatctcagc  tacccaggct

26101  gacacatgag  aatccctggc  acccagaagg  cggaggttgc  cgtagccaaa  actatggaa

26161  gaaccccatt  tgaactcagt  ttacggaatt  cttggctttt  tttcatttta  atgtctttaa

26221  taataccacc  accaaatcca  ccctcacacc  ttaccaaatc  tttactacca  aattttattt

26281  cagaattaaa  aagatagttc  acttggggcc  atttcctcac  tcctcccaaa  aaatcctgtc

26341  aatatttgaa  aagtatcaat  ggctctccct  cactttaaca  aataatttgg  ccaaatttct

26401  ctcactaatc  ttaaattctt  ccaggtctca  ttttaacaag  caccagttga  ataatgggt

26461  attatgaata  tatttaataa  taaaaaatct  gtcaaaataa  ttctgaaaag  ttttcacatt
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26521  ctttagagtc gattactata cataatacaa gtacctgccc aaaagtatgt ttgttctcct
26581  aaaccaggtt attttcctca atttattaaa ctggattctt atagaaagat tacaagggtt
26641  tgaataggca agaactgcaa agttgtgcat acttacagaa atttagggaa acacacaaag
26701  aatgaatgaa tgcaaagaca cacaaaacca ggtactttac tgcaggtctt ggtgtttttt
26761  tcagttaaac aaatcttaaa tccccaaagc caggtgaacc attaaacctc aataatgtaa
26821  cacattatct aaatactaga attcctaaag ggaacagtag gtctgaattt gtagtcttag
26881  atcagaaagt aaagcgaagg aagacaaact ggagcatggt atatacttgc gtgatttcca
26941  ctatggggtc ttcagtagag tggagaagtg cacaacttcc tagaaaattt gagtactatt
27001  cttcaggcta agaaatataa atcttgttag taacaaatgc gaaatttttg gttttctcat
27061  cagtgtggga aattctcaac acagagaaat gtttacacaa aactacagtt gtgctcatca
27121  aaatatactt gcaacttgtg taccctaatt tcccaaatac tcttttgtct tttccttttc
27181  agATAACCAC ATTTTAATAT CAGCATTGGT GATTGCTAGC ACGGTAATTT TGACAGTTTT
27241  GGGAGCAATC ATTTGGTTCC TGTACAAAAA ACATTCTGAT TCTCGTTTCA CCACAGTTTT
27301  TTCAACCGCA CCCCAATCAC CTTATAATGA AGACTGTGTT TTGGTAGTTG GAGAAGAAAA
27361  TGAATATCCT GTTCAATTTG ACTAAGTTTT TGGTAATCTT GCACTAAGAC ATCAACAAAA
27421  TGCCCTGGCA GAGATAACTT GGGAAAGATT TTAATATAAA ACTTGACATT GGATATTAGA
27481  GCTTTAATGG TATTCCTTAT TCCAGTAACA TTTTTATGTA CTCATCTGCT GTGAAAAGTC
27541  TTTAGGTTCA TTAAAAAAAC AGGTTTTAGA AATGATCTTA GATCTAATAT AGTGATTTTA
27601  AGCATCCCGT CAAAGGCAGA ATCTGTCACT TGAATGAAGG AAAGCTTAAA GCCCAAGCAG
27661  ATAAAAATAA AAGCCCAGCC TATTTGTCTT GCCTGCTGTA TCTTCCCTAT TTAGTTGACC
27721  CACTTTAGTT TATATGTTTA TTAGTAAACA TGAAATGGGG AATAAGTGAT TTTAAGTACA
27781  TCCCATACAT TTAAATATCT TTGATAATTG TTATTTTTTT GGCAGATAAT CCTCTAGAA
27841  TGTGTATCTT TTTATGATTT AGATGAAGAA AATTTTACAA CTTTTAACAC CCCACACCAA
27901  TTTTAGTTTC ATTACTTTTA CACACACCAT TTTATCACAA ATGACTCAAG TTTTAATGAA
27961  TGTTTATAAA TTATTTGAAA CAAAATATGA TCGCTGTGTC CAGGATGGCA TAGAGAAAGC
28021  TGGCAATTAG GTTAACACTT ACATATTATA GTGCCCCTTT AAGGATTTCT CTCTTGCCAC
28081  CATACCTTTT GTACTTTCCC CTATACAAGA TGTATCTCAT TCTCCTCAAG CATTTATAAA
28141  TTTTTCCTTC AATGACATGA AAACTGTGCA AGCAAAAACC GAAGAAAAAC ACTTAAGTAC
28201  AACTGTAGTG ACAGTGATCA AAGTTTTCAG TGCATTTATT GTACATTTTA AGAAAAAGGT
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Figure 15 (cont'd)

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28261  GAAAATCATT TGGGGAGTAA AAAAATGAAA AAGCTGAAAC GAGTAATTTT CCTCACCATC
28321  AATAAACCAA AAACAGGAAA GATAAAGAAT GTATAAATTT CACGTAAATT AGTCACGTAT
28381  CACTTATCAA TGGGGATACG TTCTAAGAAA TGCATAGTTA GGGAATCTTG TGTGAAAATC
28441  AGCTTGTATT TACACAAACC CAGATGGTAG AGCCTATTTT GTCCCAAACC TACACAGCAT
28501  GTTACTGTGC TGAATACTGC AGACAATTGT AACACAATAT TTGTGTATCT AAATATAGAA
28561  AAGGTACAGT AAAAATATGG TCTACTAAGG AAACACTGTT CTATATGTGG TCCATTACTG
28621  ACTGAAGTAT ACTGTCTAGA AGTCTGAGGC TCAAAGAAAA GTAATCCCTC TTCTGAATCC
28681  ACACCCCATC AATTATCTTA CTTTCTTCTG GGGAGATAGA TAGATATACT ATCTCACTAG
28741  CTTGACTAAT GGCAACAAAG TTCCAGCTTG TGTAGTCTCT TTTTATTGAC CACATGAATC
28801  GAAAACACTC ATCACAATTA ATGGCACTAT CATTAATGAG ACATGAGTAA CTAAAAAGTG
28861  ATAGAAAACT ATTAACAGTG CGGCTACATG GTACTGAAAA TGCAGGCATT ACACCAGCTG
28921  TTACACAAGC ACAAGCATGC TCTGTAAGAG CTTTACATTT CTGAGATTTT GTATAGTGAT
28981  TGAGATGTCT ATTTTATTAT TGATAGACTA TTACTAATGT CAATATTGAA CACTACCCTG
29041  GAATTCCTGC CTGGTTTTCC TACCCAAATT GTACCACTCC TTGAAGAACT ACAGGCACAG
29101  TAAAAAAAAT ATGGCGTATT ATGTGAACTA AAAGAGTTCT AAAGGAGTTC TTAAAGGAGT
29161  GGTAGAATTT GGGTAGGAAA GTGATTAAGT CCAACTTAAA ACCAACAGTC TCAAACGTCT
29221  ACAACTACAA TGTCCAATGA GCCACTAGCC ACATGAGGCT ATTTAAGTAA ATTTAGTTTA
29281  AAATCCAGTT TTCGAATTAC ATTAGCCACA TTGTCAAGTG TTCAAATCAC AGGTGGTTAG
29341  TGGCTACTGT ACTGGGCAAC ATACATTATA GAACATTTTC ATTATAGGAA GTTTTATTGG
29401  GCAGTGCTGC TCTTAAATCC TACCTTCCAC TCAACTCCCA TACAACTTTC TTTTGTACAT
29461  TTTGATACTT TCTACCTAAT GGCAGCTCTT CCAAAATAGC TGCTTTAAAC TCTGATTTAA
29521  TTTTCAATAT TTGGTTTCAT TTTTCAACAG GCCAAGAGGC CTCTGGTAAT GAAGTGCTAT
29581  ATATATATAT ATGATGGAGT CTCACTGTGC TGCCCAGGCT ACAGTGCAGT GGCTCGATCT
29641  TGGCTCTCTC CAATCTCCGC CTTGCAGGTT TTCAAGCAAT CTCCTGCCT CAGCCTCCTT
29701  AGTAGCTGGG ACCACAGACA TCTGTCACCA CACCCAGCTA ACTTTTTGTA TTTTTGGTAG
29761  AGACGGGGTT TCGCCATATT GACTGGGCTG GTCTCAAACT CCTGACCTCA AGTGATCCAC
29821  CCACCTTGGT CTCCCAAAGT GCTGGGATTA CATGCGTGAG CCACCACACT TGGCCTACAT
29881  TTTTTCTTTA TATACCAGAA CATCTATAAC AGGCACCTTA TCTACTCATT AGTGAAGAGA
29941  TAATTGGATT ACACAGGCAG GCTTGTTTAC TACATCCAGA ATGTAGAAAC TGCTTTCTTC
30001  AACATCTTGG TTCTAGCTAG TAATAACAAT ATAATTCTTT GGCAGATATT CAGAATAACA
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30061  TTTTAAACTA CATTTTCTTA GAAAATTGCA TTCTTGTAGT GAGCAGTGTA TGGTCTCTTT

30121  TGTTCAGAAT TTAAAACTGA TAACCAATGA AAGCCTTTTC TCTTATTCCT CTACCGTCAT

30181  TTACATGATA ATCTGAAGCT AATATGACAA TATTTAAATA CTAAGTGGTA CTAGGGAACT

30241  ACAAGAATAC TGTAAAGCTT AAGCCATTGT TATCACTGTC ATTTAGCATT TAATAACAAA

30301  ACTATACAGA ATTATGTGCA TACCAATGAA TGTTTTGTAC CATCTAGTTA AATTTTTTAA

30361  ATAAAGTTTT ATGGGTTAAG CAGaagacaa ctgtcatact gaattttatt aaaagtatat

30421  atacttcaaa ttcaaagcat cccttaggac ccacagaata tattaaaact accacccttа

30481  aattttatat ttttgcttta agacagacaa tgcaaaggta actggcaaga ggtgagcaaa

30541  tgttttagaa catttatatt attgcttaaa atgagatttg aaattgtaat aaaattcttg

30601  gttatgaagt ctgatgtctt ctttgagcac cagtttaaaa ggaaacattt caaacagtaa

30661  aataaatcag tgtgtacttt attttgagcc aatgttttac ataagaccaa caaactaagt

30721  gtgggcaaac tgttcaatca cttttgagaa attacatggt tcctatttag gtttgaaaaa

30781  gtagtttgtt gccataacat cagaccttaa ggtgttttaa agtgtatcct aagggtactg

30841  acagaagaaa aatacagtgt tatggaagta tacacaactc atgaccacac agtatagatc

30901  cattcatggt gaataatgtt catctgttct ccaaaggtag tgaaaaatat taagtcatca

30961  aataaatgct cagaattacc aaggaacagt taaaaaggac caggatccaa acaggttatt

31021  tatatattta tctataaaca agtgacaaca ctaaaaaaca cattgaaaac cagtgtttta

31081  aactctgaat gtgggattta aaaatattcc attaacttga gattgcaata attttttaa

31141  accaaatagc atttgactgg caagtctcat ataatttaca gctgtaatat tcctaaaagg

31201  aatatctaca tactatagcc tatcaaatat aatctgcatt ttgcaaatca atacaaaaat

31261  ctatccatca tttatacatt ttatatttat atactttta aaaattagat tttattgcta

31321  ggtgaatttg gaattcaaat taaatttgga aacttaataa tgctcttctc ataaccttct

31381  ccccattctt tttttaattt ttaaacactg gaagcaaatg attatcaaaa tgagactgca

31441  acttaaggca ttttaaaaga aaaaataatt aggtgccata tagcatttta tttcaaaagt

31501  atattttgtc ccacttttct cactagcaag agtaaaacac aaaccttttt tcataaatat

31561  gactacagta atcataacac aaaaaagggt tgataggcat tgcttagata tttaaaacaa

31621  gggtaatact ttcccactca cctaaaagaa aaaccttttt tgattaccag tttataaaca

31681  tcggatttgc tatgttaaaa agtccagcag aatttttaatt cagcaacact ggagaatgaa

31741  tatatatata caggcataca tgtgtatgta tatattcatt ttatatatag tcaatgtatt
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31801  tattaggcat  tcccccacaa  aagtaattta  tatttaattg  ccatttttaa  taaacactta
31861  tgttcacaga  tcatccatct  gtcttatatg  aagttaggca  atatcaaatg  tcctgttatg
31921  gtctccgtct  tcttcggaat  catcctctga  agctgttgaa  agaaacagg   atgatcaaga
31981  atgattttaa  gggggataag  aatgggaagt  gtaaatatga  agccagaaca  gcaatgactt
32041  gtaaaaacaa  aaatcccaat  ttagtatatt  gtttgatcaa  aatgataagt  tgtatgacag
32101  ggttagggtg  gtctgcctgt  gggtgatacc  caaccacaat  tctccccgcc  cccacaccgt
32161  tttgtaatgt  tatatcaatt  tttataaaaa  tgaaagtgct  taaaaatgtg  gttcaagagc
32221  atcttctaaa  atgtttctga  gatcaatctg  tgttcatagt  agctaatgat  atataaacac
32281  taggaaaaaa  gtcaacttaa  ggcaagtgct  ctcacacacc  tgagtaaaat  ctggcttatt
32341  accgctgcat  gtttggtgca  tccgatgaga  atgaaaagaa  gtgtacatag  aataagaggt
32401  tatgggtgtt  cttgcaattt  acatcaaagc  tatgtctata  caatgccaag  ataaaagttc
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FIGURE 16

Annotated DCL-1 sequence.

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                                                        ┌ Signal peptide
  1 CTCTCCGGCCGCGCAGCCGCTGCCGCCCACCCGCACCCGCCGTC ATGCTCCGGGCCGCGCTGCCCGCGCTCCTGCTGCCGTTGCTGGGCC
                                                    M  L R A  A L P A L L  L P L L G L 16
                        ┌ Carbohydrate recognition-like domain
 91 TCGCCGCTGCTGCCGTCGCGGACTGTCCTTCATCTACTTGGATTCAGTTCCAAG ACAGTTGTTACATTTTTCTCCAAGAAGCCATCAAAG
     A  A  A  A  V  A  D  C  P  S  S  T  W  I  Q  F  Q  D   S  C  Y  I  F  L  Q  E  A  I  K  V 46

181 TAGAAAGCATAGAGGATGTCAGAAATCAGTGTACTGACCATGGAGCGGACATGA TAAGCATACATAATGAAGAAGAAAATGCTTTTATAC
     E  S  I  E  D  V  R  N  Q  C  T  D  H  G  A  D  M  I  S  I  H  N  E  E  N  A  F  I  L 76

271 TGGATACTTTGAAAAAGCAATGGAAAGGCCCAGATGATATCCTACTAGGCATGT TTTATGACACAGATGATGCGAGTTTCAAGTGGTTTG
     D  T  L  K  K  Q  W  K  G  P  D  D  I  L  L  G  M  F  Y  D  T  D  D  A  S  F  K  W  F  D 106

361 ATAATTCAAATATGACATTTGATAAGTGGACAGACCAAGATGATGATGAGGATT TAGTTGACACCTGTGCTTTTCTGCACATCAAGACAG
     N  S  N  M  T  F  D  K  W  T  D  Q  D  D  D  E  D  L  V  D  T  C  A  F  L  H  I  K  T  G 136
             N-glycosylation
451 GTGAATGGAAAAAAG GAAATTGTGAAGTTTCTTCTGTGGAAGGAACACTATGCAAAACAGCTATCCCATACAAAAGGAAATATTTATCAG
     E  W  K  K  G  N  C  E  V  S  S  V  E  G  T  L  C  K  T  A  I  P  Y  K  R  K  Y  L  S  D 166
              ┌ Transmembrane domain                                          ┌Cytoplasmic domain
541 ATAACCACATTTTAATATCAGCATTGGTGATTGCTAGCACGGTAATTTTGACAG TTTTGGGAGCAATCATTTGGTTCCTGTACAAAAAAC
     N  H  I  L  I  S  A  L  V  I  A  S  T  V  I  L  T  V  L  G  A  I  I  W  F  L  Y  K  K  H 196

631 ATTCTGATTCTCGTTTCACCACAGTTTTTTCAACCGCACCCCAATCACCTTATA ATGAAGACTGTGTTTTGGTAGTTGGAGAAGAAAATG
     S *D  S *R  F  T *T *V  F  S  T  A  P  Q  S *P  Y  N  E  D  C  V  L  V  V  G  E  E  N  E 226
                                        Internalization?                      Late endosome targeting?
721 AATATCCTGTTCAATTTGAC TAAGTTTTTGGTAATCTTGCACTAAGACATCAACAAATGCCCTGGCAGAGATAACTTGGGAAAGATTTTA
     Y *P  V  Q  F  D  *                                                                       232

811 ATATAAAACTTGACATTGGATATTAGAGCTTTAATGGTATTCCTTATTCCAGTA ACATTTTTATGTACTCATCTGCTGTGAAAAGTCTTT
901 AGGTTCATTAAAAAAACAGGTTTTAGAAATGATCTTAGATCTAATATAGTGATT TTAAGCATCCCGTCAAAGGCAGAATCTGTCACTTGA
991 ATGAAGGAAAGCTTAAAGCCCAAGCAGATAAAAATAAAAGCCCAGCCTATTTGT CTTGCCTGCTGTATCTTCCCTATTTAGTTGACCCAC
1081 TTTAGTTTATATGTTTATTAGTAAACATGAAATGGGGAATAAGTGATTTTAAGT ACATCCCATACATTTAAATATCTTTGATAATTGTTA
1171 TTTTTTTTGGCAGATAATTCCTCTAGAATGTGTATCTTTTTATGATTTAGATGAA GAAAATTTACAACTTTTAACACCCCACACCAATTT
1261 TAGTTTCATTACTTTTACACACACCATTTTATCACAAATGACTCAAGTTTTAAT GAATGTTTATAAATTATTTGAAACAAAATATGATCG
1351 CTGTGTCCAGGATGGCATAGAGAAAGCTGGCAATTAGGTTAACACTTACATATT ATAGTGCCCCTTTAAGGATTTCTCTCTTGCCACCAT
1441 ACCTTTTGTACTTTCCCCTATACAAGATGTATCTCATTCTCCTCAAGCATTTAT AAAATTTTTCCTTCAATGACATGAAAACTGTGCAAGC
1531 AAAAACCGAAGAAAAAACACTTAAGTACAACTGTAGTGACAGTGATCAAAGTTTT CAGTGCATTTATTGTACATTTTAAGAAAAAGGTGAA
1621 AATCATTTGGGGAGTAAAAAAAATGAAAAAGCTGAAACGAGTAATTTTCCTCACC ATCAATAAACCAAAAACAGGAAAGATAAAGAATGTA
1711 TAAATTTCACGTAAATTAGTCACGTATCACTTATCAATGGGGATACGTTCTAAG AAATGCATAGTTAGGGAATCTTGTGTGAAAATCAGC
1801 TTGTATTTACACAAACCCAGATGGTAGAGCCTATTTTGTCCCAAACCTACACAG CATGTTACTGTGCTGAATACTGCAGACAATTGTAAC
1891 ACAATATTTGTGTATCTAAATATAGAAAAGGTACAGTAAAAATATGGTCTACTA AGGAAACACTGTTCTATATGTGGTCCATTACTGACT
198 1 GAAGTATACTGTCTAGAAGTCTGAGGCTCAAAGAAAAGTAATCCCTCTTCTGAATCCACACCCCATCAATTATCTTACTTTCTTCTGGGG
2071 AGATAGATAGATATACTATCTCACTAGCTTGACTAATGGCAACAAAGTTCCAGC TTGTGTAGTCTCTTTTTATTGACCACATGAATCGAA
2161 AACACTCATCACAATTAATGGCACTATCATTAATGAGACATGAGTAACTAAAAA GTGATAGAAAACTATTACAGTGCGGCTACATGGTAC
2251 TGAAAATGCAGGCATTACACCAGCTGTTACACAAGCACAAGCATGCTCTGTAAG AGCTTTACATTTCTGAGATTTTGTATAGTGATTGAG
2341 ATGTCTATTTTATTATTGATAGACTATTACTAATGTCAATATTGAACACTACCC TGGAATTCCTGCCTGGTTTTCCTACCCAAATTGTAC
2431 CACTCCTTGAAGAACTACAGGCACA GTAAAAAAATATGGCGTATTATGTGAACTAAAAGAGTTCTAAAGGAGTTCTTAAAGGAGTGGTAG
2521 AATTTGGGTAGGAAAGTGATTAAGTCCAACTTAAAACCAACAGTCTCAAACGTC TACAACTACAATGTCCAATGAGCCACTAGCCACATG
2611 AGGCTATTTAAGTAAATTTAGTTTAAAATCCAGTTTTCGAATTACATTAGCCAC ATTGTCAAGTGTTCAAATCACAGGTGGTTAGTGGCT
2701 ACTGTACTGGGCAACATACATTATAGAACATTTTCATTATAGGAAGTTTTATTG GGCAGTGCTGCTCTTAAATCCTACCTTCCACTCAAC
2791 TCCCATACAACTTTCTTTTGTACATTTTGATACTTTCTACCTAATGGCAGCTCT TCCAAAATAGCTGCTTTAAACTCTGATTTAATTTTC
2881 AATATTTGGTTTCATTTTTTCAACAGGCCAAGAGGCCTCTGGTAATGAAGTGC TATATATATATATATATATGACGGGAGTCTCACTGTGCTGC
2971 CCAGGCTACAGTGCAGTGGCTCGATCTTGGCTCTCTCCAATCTCCGCCTTGCAG GTTTTCAAGCAATTCTCCTGCCTCAGCCTCCTTAGT
3061 AGCTGGGACCACAGACATCTGTCACCACACCCAGCTAACTTTTTGTATTTTTGG TAGAGACGGGGTTTCGCCATATTGACTGGGCTGGTC
3151 TCAAACTCCTGACCTCAAGTGATCCACCCACCTTGGTCTCCCAAAGTGCTGGGA TTACATGCGTGAGCCACCACACTTGGCCTACATTTT
3241 TTCTTTATATACCAGAACATCTATAACAGGCACCTTATCTACTCATTAGTGAAG AGATAATTGGATTACACAGGCAGGCTTGTTTACTAC
3331 ATCCAGAATGTAGAAACTGCTTTCTTCAACATCTTGGTTCTAGCTAGTAATAAC AATATAATTCTTTGGCAGATATTCAGAATAACATTT
3421 TAAACTACATTTTCTTTAGAAAATTGCATTCTTGTAGTGAGCAGTGTATGGTCTC TTTTGTTCAGAATTTAAAACTGATAACCAATGAAAG
3511 CCTTTTCTCTTATTCCTCTACCGTCATTTACATGATAATCTGAAGCTAATATGA CAATATTTAAATACTAAGTGGTACTAGGGAACTACA
3601 AGAATACTGTAAAGCTTAAGCCATTGTTATCACTGTCATTTAGCATTTAATAAC AAAACTATACAGAATTATGTGCATACCAATGAATGT
3691 TTTGTACCATCTAGTTAAATTTTTTAAATAAAGTTTTATGGGTTAAGCAG
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